Amendments to the Specification:

In the fourth (4th) line from the bottom on page 14, please replace "IV V IV" with the

following:

"IV V VI"

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

Claim 1 (Previously Presented): A process for the preparation of a polymerizable dental

composition comprising the steps of

(a) preparing a liquid mixture comprising

(i) 1 to 99% w/w of a hybrid monomer component containing at least one hybrid

monomer compound having one hydrolysable siloxane group and at least one

polymerizable organic moiety, and

(ii) 99 to 1% w/w of a monomer component polymerizable with the

polymerizable organic moiety of the hybrid monomer compounds; and

(b) adding at least a stoichiometrically sufficient amount of water to the mixture to

hydrolyse the hydrolysable siloxane group of the hybrid monomer compound and to

form spherical polymerizable nanoparticles having an average particle size of from 1

to 100 nm dispersed in the monomer component, whereby the nanoparticles have a

structure with Si-O-Si bonds and peripherally exposed polymerizable organic

moieties.

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Claim 2 (Previously Presented): The process according to claim 1, wherein nanoparticles have an average particle size of from 1 to 20 nm.

Claim 3 (Previously Presented): The process according to claim 1, wherein nanoparticles have an average particle size of from 1 to 5 nm.

Claim 4 (Previously Presented): The process according to claim 1, wherein the hybrid monomer compound is a compound of the following formula (I)

$$(A)_n - X - Y - Si - R_y$$

wherein

A is a polymerizable moiety, preferably an acrylate or methacrylate group;

Rx, Ry, Rz

which may be the same or different independently represent substituted or unsubstituted C1 to C18 alkoxy, C5 to C18 cycloalkoxy, a C5 to C15 aryloxy, C2 to C18 acyloxy or halogen;

- X is a nitrogen atom or a substituted or unsubstituted C1 to C18 alkylene, C1 to C18 oxyalkylene or C1 to C18 carboxyalkylene group;
- Y is a substituted or unsubstituted C1 to C18 alkylene, C1 to C18 oxyalkylene, C5 to C18 cycloalkylene, C5 to C18 oxycycloalkylene, C5 to C15 arylene, or C5 to C15 oxyarylene or heteroarylene group; and
- n is an integer of 1 to 10.

Claim 5 (Currently Amended): The process according to claim 1, wherein the hybrid monomer compound is a compound of the following formulas 1-10:

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wherein

R is a residue derived from a diepoxide, notably a residue of the following formula

wherein X is C(CH3)2, -CH2-, -O-, -S-, -CO-, or -SO2-;

- R1 is hydrogen or a substituted or unsubstituted C1 to C18 alkyl, C5 to C18 cycloalkyl, C5 to C18 aryl or heteroaryl group;
- R2 is a divalent substituted or unsubstituted C1 to C18 alkylene, C2 to C12 alkenylene, C5 to C18 cycloalkylene, C5 to C18 arylene or heteroarylene,

R3 which may represent the same or different substituents in formula 3 and 7, is a substituted or unsubstituted C1 to C18 alkyl, C2 to C12 alkenyl, C5 to C18 cycloalkyl, C6 to C12 aryl or C7 to C12 aralkyl group, or a siloxane moiety represented by one of the

following formulae I, II or III

wherein

R5 is a divalent substituted or unsubstituted C1 to C18 alkylene, C2 to C12 alkenylene, C5 to C18 cycloalkylene, C5 to C18 arylene or heteroarylene group, preferably CH2CH2CH2,

R6 is a substituted or unsubstituted C1 to C18 alkyl, C2 to C12 alkenyl, C5 to C18 cycloalkyl, C6 to C12 aryl or C7 to C12 aralkyl group,

R7 is a substituted or unsubstituted C1 to C18 alkylene, C2 to C12 alkenyl, C5 to C18 cycloalkylene, C5 to C18 arylene or heteroarylene group,

R8 is a protecting group for a hydroxyl group, preferably forming an ether, an ester or an urethane group,

M' and M"

which may represent the same or different substituents, is a siloxane moiety represented by one of the following formulae IV, V or VI, a protecting group for a hydroxyl group, preferably forming an ether, an ester or an urethane group, or hydrogen in case R3 is a siloxane moiety represented by one of formulae I, II, or III as defined above,

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wherein

Q is an ether, an ester, a urethane or thiourethane linking group, and R5 and R6 are as defined above.

Claim 6 (Previously Presented): The process according to claim 1, wherein the hybrid monomer component comprises a compound of the following formula 11 or 12:

monomer is a mono- or polyfunctional acrylate or methacrylate, selected from the group of

methyl methacrylate, ethyleneglycol dimethacrylate,

diethyleneglycol dimethacrylate, triethyleneglycol dimethacrylate, 3,(4),8,(9)-

dimethacryloyloxymethyltricyclodecane, dioxolan bismethacrylate, vinyl-, vinylen- or vinyliden-

, acrylic- or methacrylic substituted spiroorthoesters, spiroorthocarbonates or bicyloorthoesters,

glycerin trimethacrylate, trimethylol propane triacrylate, furfurylmethacrylate.

Claim 8 (Previously Presented): The process according to claim 1, wherein the nanoparticles are

formed in the presence of metal compounds selected from the group of alkoxides or metal

complexes such as metal acetyl acetonates whereby the metals are selected from the group of Ba,

Al, La, Ti, Zr, Tl, In or other transition elements or elements of the lanthanides or actinides.

Claim 9 (Previously Presented): The process according to claim 1, further comprising the step of

adding an inorganic filler selected from La2O3, ZrO2, BiPO4, CaWO4, BaWO4, SrF2, Bi2O3,

a porous glass or an organic filler, such as polymer granulate, embrittled glass fibres or a

combination of organic and/or inorganic fillers or reactive inorganic fillers.

Claim 10 (Previously Presented): The process according to claim 1, further comprising the step of

adding a polymerisation initiator and a stabiliser

Claim 11 (Previously Presented): The process according to claim 1, wherein hydrolysis is carried

out in the presence of a catalyst.

Claim 12 (Previously presented): The process according to claim 12, wherein the catalyst is an

acid or base.

Claim 13 (Previously Presented): The process according to claim 1, wherein hydrolysis is carried

out under neutral conditions.

Claim 14 (Previously Presented): The process according to claim 1, wherein the composition

comprises a polymerizable di- or poly(meth)acrylate, at least a polymerizable monomer,

polymerisation initiators and/or sensitisers and stabilisers.

Claim 15 (Previously Presented): The process according to claim 1, wherein hydrolysis is carried

out in the presence of an organic solvent such as THF, dioxane, chloroform, toluene, acetone.

Claim 16 (Previously Presented): The process according to claim 1, wherein hydrolysis is carried

out in the presence of polymerizable monomers such as methyl methacrylate, ethylene glycol

dimethacrylate, diethylene glycol dimethacrylate, triethylene glycol dimethacrylate, trimethylol

3,(4),8,(9)-dimethacryloyloxymethyltricyclo decane, dioxolan propane triacrylate,

bismethacrylate, glycerol trimethacrylate, furfuryl methacrylate.

Claim 17 (Previously Presented): A polymerizable dental composition obtainable according to

the process of any one of claim 1.